

THE EUROPEAN AMALUS HAEMORRHOUS HBST. IN THE UNITED STATES (CURCULIONIDAE).By L. L. BUCHANAN, *U. S. Biological Survey.*

A specimen of this Ceutorhynch, taken near Syracuse, N. Y., by Mr. M. H. Hatch, was recently sent me by the collector. *Amalus haemorrhous* is recorded by several European writers as occurring on *Calluna vulgaris* (heather), and as this plant is naturalized in the coastal region from Newfoundland to Rhode Island, it is not unlikely that the weevil may become established over the same area. The following brief description should make its recognition easy:

A small, oblong, robust weevil, upper surface black, the elytra sometimes reddish. Beak as long as head and thorax, rather stout, weakly curved. Thorax without tuberosities or ocular lobes, anterior margin not reflexed, no sign of a prosternal sulcus. Fore coxae very narrowly separated. Antennae and legs red, femora unarmed, 3d tarsal joint bilobed, claws with a minute basal tooth. Funicle 6-jointed. Elytra with a scutellar spot of white, oval scales, and another similar spot along suture at apex, rest of surface with rows of very fine hairs. Underside with relatively large white scales, which are mostly slightly separated. Length, 1.7 mm.

Among our genera *Amalus* will fall in the group *Phytobii*. Its most noteworthy diagnostic features are the red legs and antennae, approximate front coxae, lack of thoracic tubercles, ocular lobes and sternal groove, and 6-jointed funicle.

THE HOST PLANT AND HABITS OF ACANTHOSCELIDES GRISEOLUS (FALL) (COLEOPT.).

By J. C. BRIDWELL

Among the plants producing a fiber of minor value are some of the species of the leguminous genus *Sesban* or *Sesbania* of which a species known as *S. sesban* or *S. macrocarpa* is generally distributed in Florida and Texas and in Arizona and California in the Colorado River valley, in Mexico from Baja, California, and Sonora to Guerrero and Vera Cruz and in Central America, and has become established in the Hawaiian Islands. The seeds contain an oil which may ultimately prove commercially useful.

The writer has already recorded¹ finding the seeds of this plant attacked in Hawaii by *Bruchus pruininus* Horn, an American species of general feeding habits native to Texas, Mexico and the other States on the Mexican border. In his field work on the natural enemies of the Bruchidae this plant was examined for Bruchidae at New Orleans and near San Antonio, and

¹Proc. Haw. Ent. Soc. 3:469, 1918.

Brownsville, Texas, without finding infestation by this species or any other.

It has, however, been known for some time that this plant was infested in the Colorado Valley by a Bruchid. There is in Dr. Chittenden's material of Bruchidae a considerable series of a Bruchid which I have determined as *Acanthoscelides griseolus* (Fall), and I have determined other material in the collection of Dr. E. C. VanDyke and in the National Museum as this species, all of it from the lower Colorado River Valley. Through the kindness of Mr. Roland McKee of the Bureau of Plant Industry I have been able to examine a lot of seeds of *Sesban sesban* from Bard, California, near Yuma, and from this material the following notes have been mainly drawn.

The *sesban* is a tall shrub with drooping branches dying back to the ground in the winter in this country but persisting and becoming a small tree in the tropics and the long and slender pods are pendant on the branches six inches or more in length and remain attached until they have split open. Dehiscence is gradual and for a long time the seeds remain in the pod and the adult females have abundant opportunity to oviposit among them, the long ovipositor permitting them to be placed within the pod through the narrow opening if the adult is not able to enter. In the material at hand none of the pods are present and it is not possible to be sure if the eggs are ever laid upon the pod but the eggs present in the material are nearly or quite without cement material and seem but lightly, if at all, attached to the seeds, so that it is likely that they are usually laid within the pod in concealment. They are elongate elliptical in outline and apparently a little less than twice as long as broad. The egg shell is thin and delicate.

The seeds are sub-cylindrical truncate at the ends, about 4 mm. long by 2 mm. wide and each serves to nourish a single larva, the entire contents of the seed being destroyed in its development. The material examined has more than fifty per cent of it been destroyed by the weevils and doubtless the rest would have been eaten if it had not been fumigated. This species is unknown from any other locality besides the Colorado Valley where it is exposed to very high degrees of heat and dryness. The material has been parasitized by some Chalcidoid parasite or parasites but no material was found in condition for determination.

The host plant is not at present of any economic importance but *Acanthoscelides griseolus* would likely become a serious pest if the oil of the seeds should ever warrant its cultivation. No other host plants are known for this species.